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| APPLICATION NO.  | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|----------------------|---------------------|------------------|
| 09/817,591   | 03/26/2001  | Yihong Gong          | CA1122              | 7751             |
| 23493  | 7590        | 08/01/2005           | EXAMINER            |                  |
| SUGHRUE MION, PLLC<br>401 Castro Street, Ste 220<br>Mountain View, CA 94041-2007 |             |                      | TRAN, QUOC A        |                  |
|  |             |                      | ART UNIT            | PAPER NUMBER     |
|  |             |                      | 2176                |                  |

DATE MAILED: 08/01/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Advisory Action  
Before the Filing of an Appeal Brief**

Application No.

09/817,591

Applicant(s)

GONG ET AL.

Examiner

Quoc A. Tran

Art Unit

2176

**--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

THE REPLY FILED 20 July 2005 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☒ The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:

- a) ☒ The period for reply expires 3 months from the mailing date of the final rejection.  
b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.

Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**NOTICE OF APPEAL**

2. ☐ The Notice of Appeal was filed on \_\_\_\_\_. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

**AMENDMENTS**

3. ☐ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because  
(a) ☐ They raise new issues that would require further consideration and/or search (see NOTE below);  
(b) ☐ They raise the issue of new matter (see NOTE below);  
(c) ☐ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or  
(d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: \_\_\_\_\_. (See 37 CFR 1.116 and 41.33(a)).

4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).  
5. ☐ Applicant's reply has overcome the following rejection(s): \_\_\_\_\_.  
6. ☐ Newly proposed or amended claim(s) \_\_\_\_\_ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).  
7. ☐ For purposes of appeal, the proposed amendment(s): a) ☐ will not be entered, or b) ☒ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.  
The status of the claim(s) is (or will be) as follows:  
Claim(s) allowed: \_\_\_\_\_.  
Claim(s) objected to: \_\_\_\_\_.  
Claim(s) rejected: \_\_\_\_\_.  
Claim(s) withdrawn from consideration: \_\_\_\_\_.

**AFFIDAVIT OR OTHER EVIDENCE**

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).  
9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing of a good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).  
10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

**REQUEST FOR RECONSIDERATION/OTHER**

11. ☒ The request for reconsideration has been considered but does NOT place the application in condition for allowance because:  
See Continuation Sheet.  
12. ☐ Note the attached Information Disclosure Statement(s). (PTO/SB/08 or PTO-1449) Paper No(s). \_\_\_\_\_.  
13. ☐ Other: \_\_\_\_\_.

*William L. Bashore*  
**WILLIAM BASHORE**  
**PRIMARY EXAMINER**

7/28/2005

Continuation of 11. does NOT place the application in condition for allowance because: The Office has completed a through study of Applicant's Remarks of 07/20/05; but does not place the application in condition for allowance because: Responses to Remarks pages 1-7:

The main thrust of the applicant's argument is Billheimer does not teach creating a weighted document term-frequency vector for said document; for each sentence in said document, creating a weighted sentence term-frequency vector; computing a score for each said weighted sentence term-frequency vector in accordance with relevance to said weighted document term-frequency vector. Examiner respectfully disagrees, the reason of rejection is set forth in the rejection above. In further support of the previous rejection, please note the following: Using broadest reasonable interpretation of the claims, the Billheimer reference teaches and/or suggests these limitations. Specifically, Billheimer teaches where a user to perform text mining operations, such as: information retrieval, term and document visualization, term and document clustering, term and document classification, summarization of individual documents and groups of documents, and document cross-referencing. This is accomplished by representing the text of a document collection using subspace transformations. This subspace transformation representation is performed by: constructing a term frequency matrix of the term frequencies for each of the documents, transforming the term frequencies for statistical purposes, and projecting the documents or the terms into a lower dimensional subspace. As the document collection is updated, the subspace is dynamically updated to reflect the new document collection (Billheimer at the Abstract). There for the rejection of independent claim 1 is proper, which lead to the rejection of the analogous limitation recited in claim 9.

Further more Applicants argue that, Herz failed to teach or suggest the weighted-sentence term-frequency, and failed to provide the deficiencies of Billheimer. The Office respectfully disagreed, for more detail sees the previous rejection, which set forth in the rejection above, and also noticed that, the Office recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. In this case, Herz did not explicitly teaches, weighted-sentence term-frequency; however as taught by Billheimer at col. 6, lines 10-25 (i.e.... information retrieval can be performed upon user request. Information retrieval is performed by constructing a term frequency query vector ... determining similarity by measuring the distance between the query and the documents, and returning ranked matching documents...).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to have modified Herz' s teaching into Billheimer's teaching to provide a way to include the feature, wherein calculating an inner product of said weighted sentence term-frequency vector and said weighted document term-frequency vector. One of ordinary skill in the art would have been motivated to perform such a modification to provides users the ability for filtering, browsing and for pre-caching of data at locations on the data communication network and at times that minimize the traffic flow in the communication network to thereby efficiently provide the desired information to the user and/or conserve valuable storage space by only storing those target objects (or segments thereof) which are relevant to the user's interests, as taught by '195 at col. 7, line 50 through col. 8, line 50 ( i.e... The ability to measure the similarity of profiles describing target objects and a user's interests can be applied in two basic ways: filtering and browsing...). There for the rejection of dependent claims 2-8 is proper.

In regard to the rejection of claim 9-12, is directed to a computer system for performing the method of claims 1-3 and are similarly rejected along the same rationale.

In regard to the rejection of claim 13, incorporate substantially similar subject matter as cited in claims 1-3, and is similarly rejected along the same rationale.

In regard to the rejection of claims 21-25, 26-28 and 29-32, Applicant argues that, none of the cite preferences teach Billheimer failed to teach the feature, constructing a terms-by-sentences matrix for said document. The Office respectfully disagreed, for more detail sees the previous rejection, which set forth in the rejection above, and also as taught by Herz at col. 13, line 40 through col. 14, line 35 (i.e.... textual and associative attributes ... for information retrieval purposes they can be decomposed into smaller, simpler numeric attributes.... In particular, a textual attribute, such as the full text of a movie review, can be replaced by a collection of numeric attributes that represent scores to denote the presence and significance of the words ... score is often called the "term frequency" (TF) of the word... occurrence of a word in the text's title might be counted as a 3-fold or more generally k-fold occurrence... break the text into overlapping word bigrams (sequences of 2 adjacent words), or more generally, word n-grams. ...Conceptually speaking, in the character 5-gram case, the textual attribute would be decomposed into at least  $26^{sup.5} = 11,881,376$  numeric attributes), also as taught by Billheimer at the Abstract (i.e. A text mining program is provided that allows a user to perform text mining operations, such as: information retrieval, term and document visualization, term and document clustering, term and document classification, summarization of individual documents and groups of documents, and document cross-referencing. This is accomplished by representing the text of a document collection using subspace transformations. This subspace transformation representation is performed by: constructing a term frequency matrix of the term frequencies for each of the documents, transforming the term frequencies for statistical purposes, and projecting the documents or the terms into a lower dimensional subspace. As the document collection is updated, the subspace is dynamically updated to reflect the new document collection). There for the rejection of dependent claims 21-25, 26-28 and 29-32 is proper.

*William L. Bashore*  
WILLIAM BASHORE  
PRIMARY EXAMINER  
7/28/2005